(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/096429 A1

(51) International Patent Classification[7]: H01M 8/14

(21) International Application Number: PCT/IT2004/000164

(22) International Filing Date: 31 March 2004 (31.03.2004)

(25) Filing Language: Italian

(26) Publication Language: English

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/096429 A1

(54) Title: AN AQUEOUS ELECTROLYTE MIXTURE FOR MCFCs

(57) Abstract: The present invention relates to an electrolytic mixture for molten carbonate fuel cells (MCFCs). The carrier solution is constituted by one or more organic solvents and water, with an organic solvent percentage comprised of between 5% and 80%. The electrolyte consists of a mixture of Li_2CO_3 and $LiKCO_3$ in such stoichiometric ratios as to give the Li_2CO_3/K_2CO_3 62/38 eutectic mixture. The compound $LiKCO_3$ has a solubility in water, like lithium carbonate, less than that of the potassium carbonate, which is normally found in MCFC electrolytic mixtures. This allows the resolution of the problem of electrolyte loss during the operation of the cell, due to the solubilisation of the same in water.